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On the mainly Siberian spider genera *Wubanoides*, *Parawubanoides* gen.n. and *Poeciloneta* (Aranei Linyphiidae)

О преимущественно сибирских родах пауков *Wubanoides*, *Parawubanoides* gen.n. и *Poeciloneta* (Aranei Linyphiidae)

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KEY WORDS: Siberian, *Wubanoides, Parawubanoides* n., *Poeciloneta.*
КЛЮЧЕВЫЕ СЛОВА: сибирские, *Wubanoides, Parawubanoides* n., *Poeciloneta.*

ABSTRACT: The genus *Wubanoides* Eskov, 1986 comprises 7 species, belonging to three species-groups: (1) the *fissus*-group with *W.uralensis* Pakhorukov, 1981 (= *W.longicornis* Eskov, 1986 syn.n.), *W.fissus* (Kulczynski, 1926) and *W.kayacensis* (Paik, 1965) comb.n. ex *Centromerus*; (2) the *septentrionalis*-group with *W.septentrionalis* (Oi, 1960), *W.pacificus* sp.n. and *W.enormitus* (Tanasevitch, 1988) comb.n. ex *Lepthyphantes*; (3) the *kolymensis*-group with *W.kolymensis* (Tanasevitch et Eskov, 1987) comb.n. ex *Lepthyphantes*. A new genus *Parawubanoides* gen.n., most closely related to *Bolyphantes*, comprises 3 species: *P.unicornis* (O.P.-Cambridge, 1873) comb.n. (=*Bathyphantes fucatus* Kulczynski, 1885 syn.n.) (the type-species) and *P.marusiki* (Tanasevitch, 1987) comb.n., both - ex *Lepthyphantes*, and *P.nigromaculatus* (Zhu et Wen, 1983) comb.n. (=*Bolyphantes auriformis* Zhu et Tu, 1986 syn.n.) ex *Bolyphantes*. The genus *Poeciloneta* Kulczynski, 1894 consists of two subgenera, *Poeciloneta* (s.str.) comprising 10 species, and *Acanthoneta* subgen.n. comprising 2 species: *P.(A.) aggressa* (Chamberlin et Ivie, 1943) (the type-species) comb.n. ex *Poeciloneta* and *P.(A.) furcata* (Emerton,1913) comb.n. ex *Lepthyphantes*. The relations and the zoogeographical patterns of all genera are discussed. Keys to the known *Parawubanoides* and *Wubanoides* species are given. Alongside, new generic names, *Pseudowubana* nom.n. and *Conothorax* n.nov. are proposed to substitute *Veles* Pakhorukov, 1981 (praeoccupied in Aves) and *Conithorax* Eskov,1988 (praeoccupied in Diptera), respectively.

РЕЗЮМЕ: Род *Wubanoides* Eskov, 1986 включает 7 видов, принадлежащих к 3 группам видов: (1) *fissus*-группа - *W.uralensis* Pakhorukov, 1981 (= *W.longicornis* Eskov, 1986, syn.n.), *W.fissus* (Kulczynski, 1926), и *W.kayacensis* (Paik, 1965) comb.n., переведенный из *Centromerus*; (2) *septentrionalis*-группа - *W.septentrionalis* (Oi, 1960), *W.pacificus* sp.n. и *W.enormitus* (Tanasevitch, 1988) comb.n., переведенный из *Lepthyphantes*; (3) *kolymensis*-группа - *W.kolymensis* (Tanasevitch et Eskov, 1987) comb.n., переведенный из *Lepthyphantes*. Установлен новый род *Parawubanoides* gen.n., наиболее близкий к роду *Bolyphantes* и включающий 3 вида: *P.unicornis* (O.P.-Cambridge, 1873) comb.n. (= *Bathyphantes fucatus* Kulczynski, 1885 syn.n.) (типовой вид) и *P.marusiki* (Tanasevitch, 1987) comb.n., переведенные из *Lepthyphantes*, и *P.nigromaculatus* (Zhu et Wen, 1983) comb.n. (=*Bolyphantes auriformis* Zhu et Tu, 1986 syn.n.), переведенный из *Bolyphantes*. Род *Poeciloneta* Kulczynski, 1894 состоит из 2

подродов: номинативного *Poeciloneta* (s.str.), включающего 10 видов, и нового подрода *Acanthoneta* subgen.n.; последний включает 2 вида: *P.(A.) aggressa* (Chamberlin et Ivie, 1943) comb.n. (типовой вид), переведенный из *Poeciloneta*, и *P.(A.) furcata* (Emerton, 1913) comb.n., переведенный из *Lepthyphantes*. Обсуждаются таксономические связи и особенности географического распространения всх трех родов, для родов *Wubanoides* и *Parawubanoides* приведены определительные ключи. Попутно предложены новые названия, *Pseudowubana* nom.nov. и *Conothorax* nom.nov. для замещения родовых названий *Veles* Pakhorukov, 1981 (преоккупировано в птицах) и *Conithorax* Eskov,1988 (преоккупировано в Diptera), соответственно.

The genus *Wubanoides* was initially established to comprise three species: *W.longicornis* Eskov, 1986 (the type-species), from West Siberia and Polar Cisuralia, *Veles uralensis* Pakhorukov, 1981, from the Urals, and *Lepthyphantes fissus* Kulczynski, 1926, from Kamtchatka. It was considered as a relative of both *Lepthyphantes* Menge, 1866 and *Bolyphantes* C.L.Koch, 1837 [Eskov, 1986]. Recently, two additional species were transferred to *Wubanoides*: the Japanese *Arcuphantes septentrionalis* (Oi, 1960) by Saito & Yasuda [1989], and the Korean *Centromerus kayacensis* Paik, 1965 by Eskov (in press). Besides, new localities of some *Wubanoides* species were recorded in the last years: *W.longicornis* was found in Mongolia [Eskov, 1989], Czechoslovakia [Ruzicka, 1990], and the Urals [Esyunin, 1991]; *W.fissus* in Hokkaido [Saito & Yasuda, 1989], and Chukotka Peninsula [Marusik et al., in press]; and *W.septentrionalis* in Sakhalin and Kunashir Islands [Eskov, 1990b].

In the course of our investigations of the linyphiid spider fauna of Siberia and the Far East we have come across some seemingly congeners of *W.longicornis*, both new and previosly assigned to other linyphiid genera. The primary generic definition of *Wubanoides* thus warrants extention, and its relationships should be clarified. The description of new species and a reconsideration of the taxonomic status of some *Wubanoides* and *Lepthyphantes*, as well as an analysis of the distribution of both Siberio-Far Eastern genera *Wubanoides* and *Parawubanoides* gen.n., and Siberio-Nearctic genus *Poeciloneta* are the subjects of the present paper.

Besides the authors' collectings, abbreviated in the text as (KE) and (YM), respectively, this paper is based on materials taken by: V.V. Belov (VB), S.I. Golovatch (SG), V.G. Gratchev (VG), G.F. Kurtcheva (GK), L.B. Rybalov (LR), I.D. Sukatcheva (IS), A.V. Tanasevitch (AT) and V.V. Zherikhin (VZ) (all - Moscow), V.D. Bakurov (VDB), D.V. Logunov (DL) and B.P. Zakharov (BZ) (all -Novosibirsk), A.M. Basarukin (AB) (Yuzhno-Sakhalinsk), S.N. Danilov (SD) (Ulan-Ude), N.E. Dokutchayev (ND) (Magadan), G.N. Ganin (GG) (Khabarovsk), M.N. Gromyko (MG) (Sikhote-Alin State Reserve), N.N. Vinokurov (NV) (Yakutsk), S.Koponen (SK) (Turku, Finland), and W.Schawaller (WS) (Stuttgart, Germany).

Type materials belong to the collection of Zoological Museum of the Moscow State Univerity. The following abbreviations have been accepted in the text: Fe - femur, Ti - tibia, Mt - metatarsus, Tm - position of metatarsal trichobothrium, PME - posterior medial eyes. The leg joints spinulation is givind in the following formula: Ti I - 2130; this means, that tibia I has two dorsal, one pro-, three retrolateral, and no ventral spines. All measurements in the descriptions are given in mm.

Familia Linyphiidae

Genus Wubanoides Eskov, 1986

Type-species: *Wubanoides longicornis* Eskov, 1986.

DIAGNOSIS AND DESCRIPTION. Small linyphiine spiders. Male carapace often bears a strong, horn-like. pointed seta which rises immediatly behind PME and arches forward over ocular area; in some species the seta crowns a finger-shaped carapace process. Chelicera medium-sized, unmodified, with well-developed lateral stridulatory fields, and two (in males) or three (in females) promarginal teeth. General leg spinulation: Fe I - 0100, Fe II-IV - 0000, Ti I - 2000 (in male) or 2110 (in female), Ti II - 2010, Ti III-IV - 2000, Mt I-IV - 1000 (in one species, tibiae provided with additional ventral spines); Mt I in male provided with two ventrolateral rows of protruding bristles; Tm I - 0.25, Tm IV absent. Abdomen

with a dorsal pattern of transverse stripes.

Male palpal tibia with three trichobothria, rounded (in one species with a dorsal outgrowth). Cymbium with a basal process of various shapes, in a few species, such a process absent. Paracymbium medium-sized, comparatively simple, strictly L-shaped, its distal (horizontal) portion provided with 2-3 teeth and, usually, several bristles. Embolic division: radix narrow and straight; a ribbon-shaped, poorly sclerotized and usually two-branched lamella characteristica very long and reaches to anterior edge of cymbium; embolus of various shapes, from bristle to an irregular plate. Epigyne projected, scape rounded or elongated, both stretcher and lateral lobes absent.

TAXONOMIC REMARKS. The genus clearly belongs to the tribe Lepthyphantini (s.str.)* and characterized by: (1) male leg I spinulation - absence of pro- and retrolateral spines on tibia, and presence of ventrolateral rows of protruded bristles on metatarsi; (2) non-elongated male chelicera with only two promarginal teeth; (3) L-shaped paracymbium usually bearing bristles on its distal portion; (4) very long, straight, poorly sclerotized lamella characteristica; (5) epigyne without stretcher; (6) strong, horn-like seta on male carapace in most of the species.

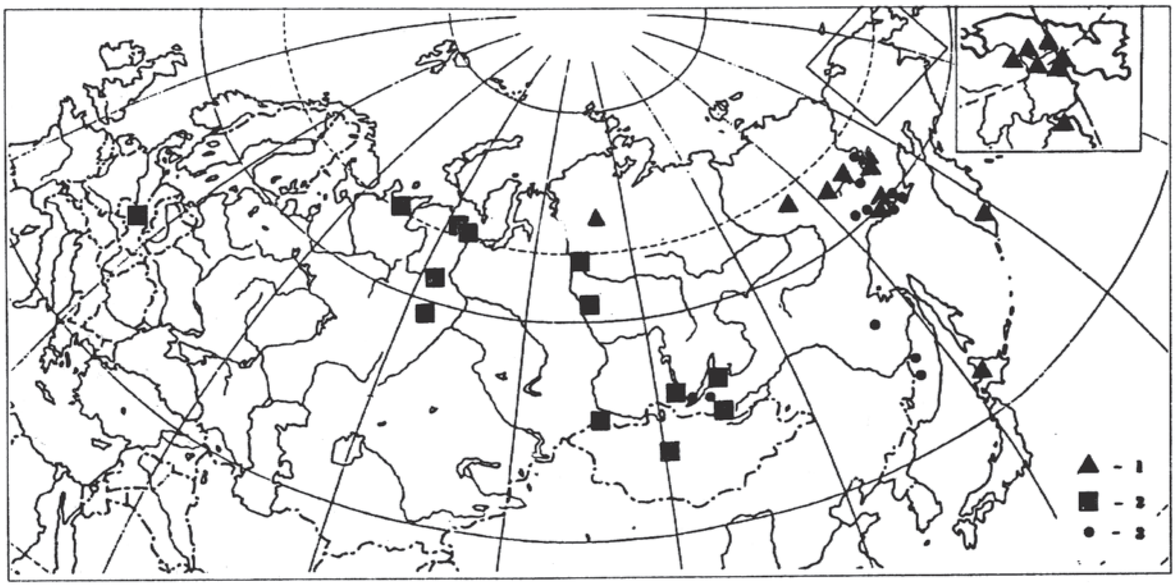
By the overall male palpal conformation, the genus seems to be close to the mainly East Siberian genus *Poeciloneta* Kulczynski, 1894 (see Tanasevitch, 1989a), while the shape of the lamella characteristica (4) in *Wubanoides* seems to be unique. It should be noted, that the lamella characteristica of some *Lepthyphantes* Menge, 1866 species, i.e. the himalayan *L.ancoriformis* Tanasevitch, 1987 and the Chinese *L.cultellifer* Schenkel, 1937 (see Tanasevitch, 1987b: Figs.53-54; 1989b: Fig.223) are similar in some respects to the one of *Wubanoides* species. On the other hand, by the absence of an epigynal stretcher (5), the genus is close to the Afrotropical genus *Metalepthyphantes* Locket, 1968; this character was stated by Locket [1968: 99] as a key for the latter. A stretcher is absent in the Japanese-Korean *Doenitzius pruvus* Oi, 1960 too (see Oi, 1960: Figs. 223-224; Paik, 1965b: Figs. 4-5)**. Finally, by both leg I spinulation (1) and the presence of a horn-lke carapace seta (6) in the males, the genus is similar to the East-Siberian *Parawubanoides* gen.n. (see below). Such a combination of the above characters, however, is unique and clearly distinguishes *Wubanoides* from all the lepthyphantines, the same as the presence of bristles on the distal portion of paracymbium (3) and only two promarginal teeth on the male chelicera (2).

It should be mentioned that the males of all the species initially included in *Wubanoides* possess a postocular horn surmounted by a robust seta; this structure being listed by Eskov [1986] in the generic diagnosis. However, the phylogenetic significance of this character was estimated as being quite low due to the presence of similar setiferous horns in various, clearly unrelated, taxa of both linyphiines (the genus *Wubana* Chamberlin,1919) and erigonines ("*Wubana*" *hamifera* Denis, 1936 and the monobasic genera *Holma* Locket, 1974 and *Veles* Pakhorukov, 1981) (see Eskov, 1986: 181). The new limits and volume of *Wubanoides*, now uniting species with a setiferous horn, species with a simple postocular seta, as well as species lacking either, confirm the above opinion. A similar situation was recently discovered in the erigonine genus *Trachelocamptus* Simon, 1884, in which only one of its numerous members, i.e. *T.monoceros* Tanasevitch, 1989, possesses such a horn (see Tanasevitch, 1989b: Figs.191-192). Due to quite a frequent and undoubtedly independent evolving of this character in taxonomically distant linyphiid genera, its ontogenetic development ought to be supposed as the operated by a simple (or

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* The tribe Lepthyphantini (s.str.) Simon, 1884 is accepted here as comprising the following 10 genera: *Lepthyphantes* Menge, 1866, *Arcuphantes* Chamberlin & Ivie, 1943, *Bolyphantes* C.L.Koch, 1837, *Doenitzius* Oi, 1960, *Metalepthyphantes* Locket, 1968, *Oreophantes* Eskov, 1984, *Poeciloneta* Kulczynski, 1894, *Stygophantes* Kratochvil, 1948, *Troglohyphantes* Joseph, 1882, *Wubanoides* Eskov, 1986, and *Parawubanoides* gen.n. It should be noted, that A.V.Tanasevitch considers *Lepthyphantes* as an assemblage of several independent genera, and we agree with such an opinion.

** This species, in our opinion, is not a congener of the type-species of *Doenitzius* Oi, 1960, i.e. *D.peniculus* Oi, 1960.



Map 1. Distribution of *Wubanoides* species: 1 - *W.fissus*; 2 - *W.uralensis*; 3 - *W.pacificus*.
Карта 1. Распространение видов рода *Wubanoides*: 1 - *W.fissus*; 2 - *W.uralensis*; 3 - *W.pacificus*.

at least a standard) genetic mechanism. Just the same mechanism seems to be the cause of repeated appearances ofthis male character in females of some *Wubanoides* species (see "Taxonomic remarks" under *W.uralensis*).

DISTRIBUTION. The genus comprises 7 species: *W.uralensis* (Pakhorukov, 1981) (= *W.longicornis* Eskov, 1986), distributed in Siberia, Mongolia and Central Europe (Czechoslovakia), *W.fissus* (Kulczynski, 1926), *W.pacificus* sp.n., and *Lepthyphantes kolymensis* Tanasevitch et Eskov, 1987, all - from East Siberia, *W.septentrionalis* (Oi, 1960), *Centromerus kayacensis* Paik, 1965, and *Lepthyphantes enormitus* Tanasevitch, 1988, all - from the Far East, including Japan and Korea. Three species groups, named *fissus*, *septentrionalis* and *kolymensis*, are designated here.

1. The *fissus*-group

(i) Ventral spines on tibiae absent; (ii) a strong, horn-like seta on male carapace present, usually crowning a finger-shaped process; (iii) basal process of cymbium large, claw-like; (iv) distal portion of paracymbium bearing bristles; (v) embolus moderately long, as a slightly curved stick.

Wubanoides uralensis (Pakhorukov, 1981)
Map 1.

Mengea (=Allomengea) warburtoni (non O.Pickard-Cambridge, 1898): Izmailova, 1978: 11, Fig. a (♀).
Veles wagae (non O.Pickard-Cambridge, 1873): Pakhorukov, 1981: 81, Figs. 27-32 (♂, ♀).
Veles uralensis Pakhorukov, 1981: 82, Figs. 33-34 (♀).
Wubanoides longicornis Eskov, 1986: 175, Figs. 1-9 (♂, ♀)), syn.n.
Wubanoides uralensis: Eskov, 1986: 179.

MATERIAL. 1♂, 1♀ - Tuva Autonomous Republic, Tes-Khem District, 10 km NW off Khol-Oozhu, East Tannu-Ola Mt. Range, h = 800 m, *Larix* forest, 10.07.1989 DL; 1♂, 1♀ - Chita Area, Kyra District, Khentei Mts., Sokhonda State Reserve, 20.08.1991 DL; 2♀ - Buryat Autonomos Republic, Baikal Lake, Svyatoi Nos Peninsula, moraine, 26.06.1991 SD.

TAXONOMIC REMARKS. *W.uralensis* is the subject of great confusion and some misidentifications. A female from Irkutsk identified, described and figured by Izmailova [1978] as *Allomengea warburtoni* undoubtedly belongs to *W.uralensis*, judged from the shape of the epigyne, as well as by body size and coloration, in particular by the abdominal pattern. Later, Pakhorukov [1981] misidentified it as *Erigone wagae* O.Pickard-Cambridge, 1873, designated the redescribed "*E.wagae*" as the type-species of a new genus, *Veles*, and synonymized the *Lepthyphantes fissus* Kulczyn-

ski, 1926 under it. A single female, possessing by the "male" horn-like carapace seta, as well as displaying minor differences in both the shape of the epigyne and cheliceral dentation, was described by him as a representative of a separate congeneric species, i.e. *Veles uralensis* Pakhorukov, 1981.

Eskov [1986] estimated almost all Pakhorukov's [1981] taxonomic conclusions as erroneous. Firstly, the real *Erigone wagae* sensu O.Pickard-Cambridge, 1873 was redescribed and, with its generic independence being confirmed, the generic name *Veles* Pakhorukov, 1981 was applied to it; this taxon still remains monobasic*. Secondly, the new genus *Wubanoides* was erected to comprise *E.wagae* sensu Pakhorukov, 1981 as the type-species, and a new name, *W.longicornis*, was propossed for that species. Thirdly, the independence of *Lepthyphantes fissus* was confirmed, and its junior synonymy was rejected; this species was also included in *Wubanoides*. Forthly, the independence of *V.uralensis* was argued, and the single known female of that species was supposed to be but a gynandromorphous specimen of *W.longicornis* [Eskov, 1986: 179]; the final solution of that problem was left for the future.

To date, despite a sufficient enrichment of *Wubanoides* collectings, the holotype of *W.uralensis* remains a single representative of this species. On the other hand, the same creature, i.e. a female with a "male" horn, was collected at the Kolyma River in the population of another *Wubanoides* species, i.e. *W.fissus*. We do not see any reason to consider this specimen representing a species different from *W.fissus*. The e. istence of quite a common mutation provoking such a mode of gynandromorphism in different *Wubanoides* species should be rather supposed. Hence, we confirm now Eskov's [1986] anticipation and consider *W.uralensis* and *W.longicornis* as a single species, named *W.uralensis* (Pakhorukov, 1981) by priority.

DISTRIBUTION. This species is recorded in Ceske Stredohori Mts. (Sudetas), Czechoslovakia [Ruzicka, 1990], in several localities in the Urals and Polar Cisuralia [Pakhorukov, 1981, Eskov, 1986, Esyunin, 1991], in middle and lower Yenisei River flows [Eskov, 1986], southern Cisbaikalia [Izmailova, 1978], Tuva and southern Transbaikalia (original data), and Khangai Mts., Mongolia [Eskov, 1989] (Map 1).

Wubanoides fissus (Kulczynski,1926)
Map 1.

Lepthyphantes fissus Kulczynski,1926: 60, Tab. 3, Figs. 22-23(♀).

Wubanoides fissus: Eskov, 1986: 177, Figs. 10-14 (♂, ♀).

Wubanoides fissus: Saito & Yasuda, 1989: 25, Figs. 1-5 (♂, ♀)

MATERIAL. 1♀ (hynandromorph specimen) - Magadan Area, upper Kolyma River, Sibit-Tyellakh, in stack of fire-logging, 1984 KE; 1♂ - Yakut Autonomous Republic, mouth of Otto-Sala River (right tributary of Dulgalakh River, basin of Yana River), 06.1989 NV.

DISTRIBUTION. This species is recorded in southern Kamtchatka Peninsula [Kulczynski, 1926], in several localities at Kolyma River and Chukotka Peninsula [Eskov, 1986; Marusik et al., in press], on Verkhoyansk Mt. Range (original data) and Putorana Plateau [Eskov, 1986], and at Hokkaido Island [Saito & Yasuda, 1989] (Map 1). The record of this species at Kamtchatka River by Sytshevskaja [1935] is erroneous and is applied in reality to *Allomengea dentisetis* (Grube, 1861) (see Eskov, 1986).

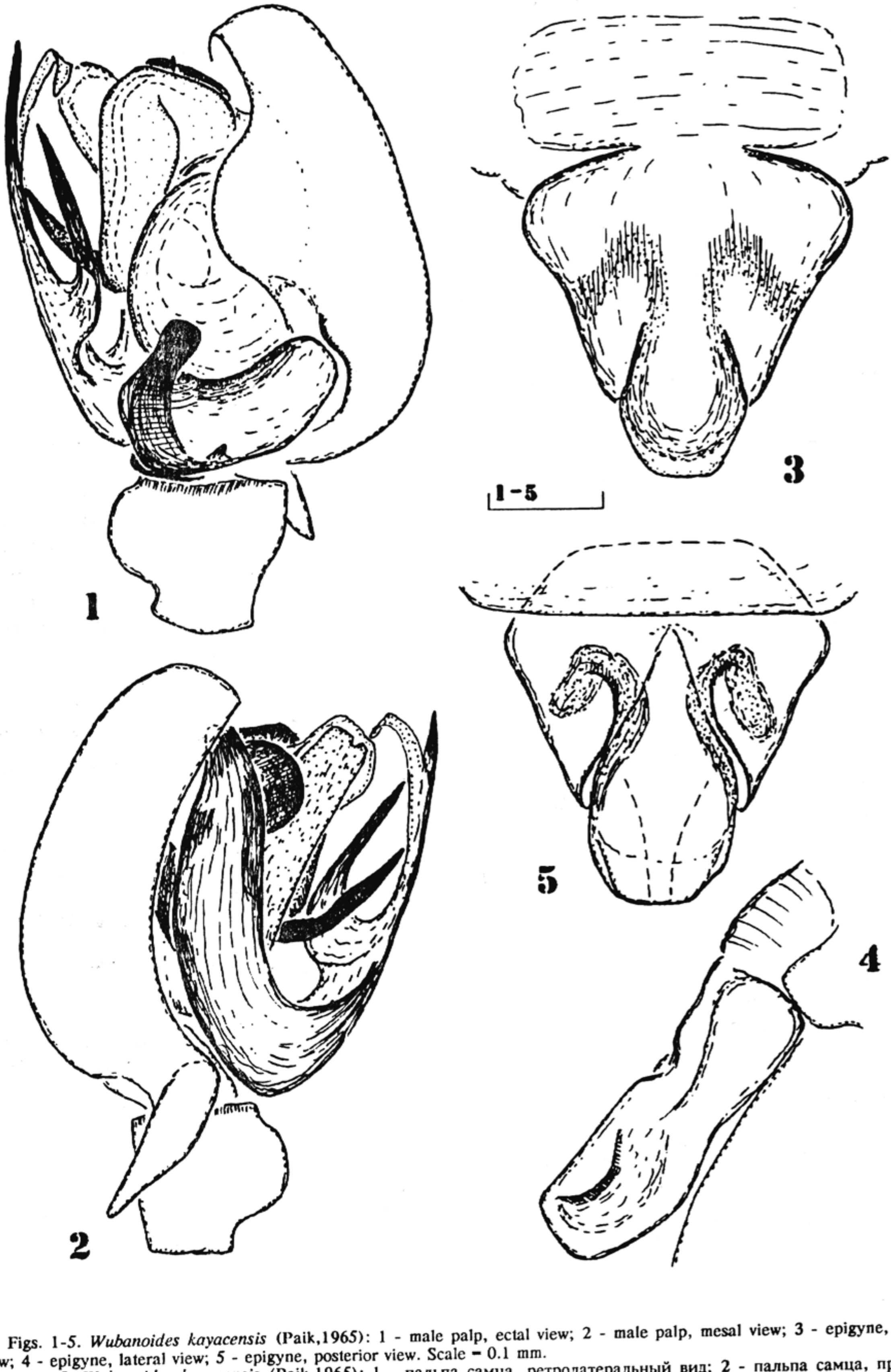
Wubanoides kayacensis (Paik,1965)
Figs.1-5, Map 2.

Centromerus kayacensis Paik, 1965a: 24, Figs. 7-9 (♀).

Wubanoides kayacensis: Eskov, in press.

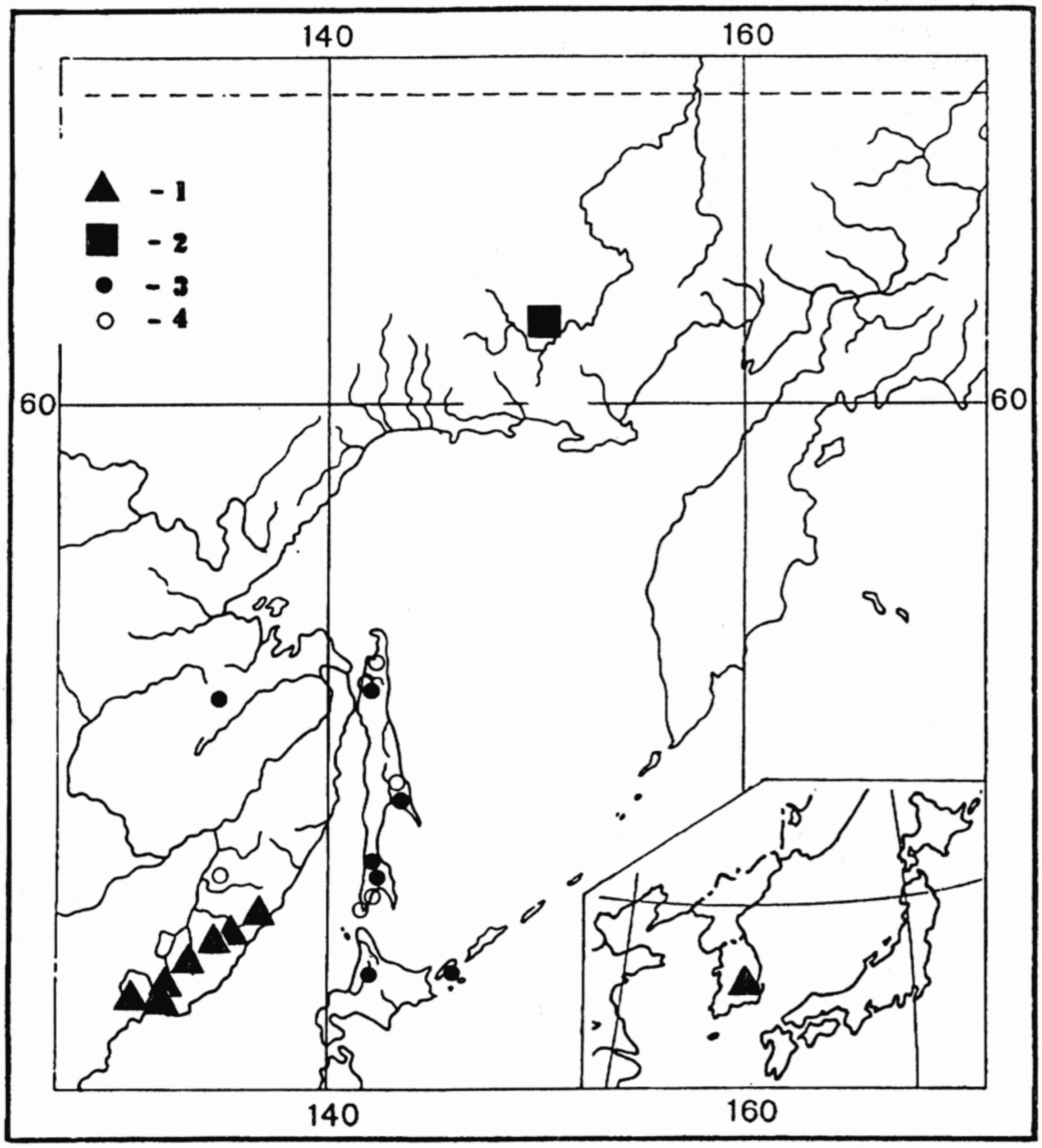
MATERIAL. 3♂, 7♀ - Maritime Province, Kedrovaya Pad Reserve, valley broadleaved forest, 25.09.1984 BZ; 2♀ - Sikhote-Alin Reserve, valley forest of *Betula*, 24.06. 1984 MG; 1♀ - Suputinsky Reserve, Grabovaya Sopka, forest of *Abies*, 23-25.05.1972 GK; 1♀ -

* The generic name is praeoccupied by *Veles* Bangs,1918 (in Aves). Now we take the opportunity to propose a substitute name, *Pseudowubana* nom.n., for *Veles* Pakhorukov, 1981.
Here we also replace the another homonym: *Conothorax* n.nov. pro *Conithorax* Eskov,1988 (praeoccupied in Diptera: *Conithorax* Brunetti,1918).



Figs. 1-5. *Wubanoides kayacensis* (Paik,1965): 1 - male palp, ectal view; 2 - male palp, mesal view; 3 - epigyne, frontal view; 4 - epigyne, lateral view; 5 - epigyne, posterior view. Scale = 0.1 mm.

Рис.1-5. *Wubanoides kayacensis* (Paik,1965): 1 - пальпа самца, ретролатеральный вид; 2 - пальпа самца, пролатеральный вид; 3 - эпигина, вид спереди; 4 - эпигина, вид сбоку; 5 - эпигина, вид сзади. Масштаб 0.1 мм.



Map 2. Distribution of *Wubanoides* species: 1 - *W.kayacensis*; 2 - *W.kolymensis*; 3 - *W.septentrionalis*; 4 - *W.enormitus*.
Карта 2. Распространение видов рода *Wubanoides*: 1 - *W.kayacensis*; 2 - *W.kolymensis*; 3 - *W.septentrionalis*; 4 - *W.enormitus*.

Ussuri Reserve, Kamenushka River, 2.07.1976 GK; 2♀ - same locality, 25-30.06.1980 VB; 1♀ - Chuguyevka District, Pravaya Sokolovka River (basin of Ussuri River), forest of *Pinus koraiensis*, 6.09. 1974 GK; 2♂ - Anuchino District, Chernyshevka, conifero-broadleaved forest, 17-26.05.1978 VDB; 7♀ - same locality and biotope, 23.07-13.08.1978 VDB; 1♀ - Ussuriysk District, source of Suputinka River, 30.06.1980 VVB; 1♀ - Sinancha River (left tributary of Iman River), 15 km upstream off Cheremshany, 26.08.1986 VZ & VG; 2♀ - Vladivostok, Botanical Garden, 9.06.1984 SG & LR.

DESCRIPTION. Total length of male/female 2.00-2.18/1.88-2.00. Carapace orange, with black rings around eyes,its length/width 0.93-1.00/0.72-0.75 in male, 0.80-0.88/ 0.63-

0.68 in female; male carapace with a strong seta behind a eye area. Legs orange-yellow, length of joints of leg I/IV 1.18/1.15+0.28/0.25+ 1.18/1.13+1.20/1.15+0.80/0.68 in male, 0.98/0.98+0.28/0.25+0.93/ 0.83+0.90/0.85+0.65/0.55 in female. Abdomen greyish-rose, with a dirty-white dorsal pattern. Genitalia as in Figs. 1-5.

DISTRIBUTION. This species is recorded in Kaya Mts. in southern Korean Peninsula [Paik, 1965a] and southern Maritime Province (original data) (Map 2).

2. The *septentrionalis*-group

(i) Ventral spines on tibiae absent; (ii) strong, horn-like seta on male carapace present or absent; (iii) basal process of cymbium absent or substituted by 1-2 minute tubercles; (iv) distal portion of paracymbium bearing bristles; (v) embolus as a very long and thin, regularly curved bristle.

Wubanoides septentrionalis (Oi,1960)
Map 2.

Fusciphantes septentrionalis Oi, 1960: 205, Figs. 274-276 (♀).
Arcuphantes septentrionalis: Yaginuma, 1977: 379.
Wubanoides septentrionalis: Saito & Yasuda, 1989: 27, Figs. 6-10 (♂, ♀).

MATERIAL. 2♂, 1♀ - Sakhalin Area, Poronaisk District, middle flow of Rukutama River, 7-16.04.1988, AB; 1♂-Kuril Islands, Kunashir Island, Otradnoye, 19.09.1987 AB; 1♀ - Khabarovsk Province, Ulchsky District, Sofiyskoye, Skalisty Mt. Range (Yam-Alin Mts.), h=350 m, forest of *Picea* with gren mosses, 20.07.1990 GG; 5♂, 4♀ - Japan, Hokkaido Island, Mt. Nisei (Mts. Daisetsu-San), 16.07. 1984, leg. N.Yasuda, det. H.Saito.

DISTRIBUTION. This species is recorded from the mountains of north-eastern Hokkaido [Oi, 1960; Saito & Yasuda,1989]*, from several localities on Sakhalin and Kunashir Islands [Eskov,1992] and from the Yam-Alin Mountains in northern Cisamuria (original data) (Map 2).

Wubanoides enormitus (Tanasevitch,1988), comb.n.
Figs.14-16, Map 2.

Lepthyphantes enormitus Tanasevitch, 1988: 191, Figs.31-32 (♀)

MATERIAL. 1♂, 1♀ - Sakhalin Island, Okha District, lower Beryozovka River (basin of Bolshaya River),10.09.1990 AB; 2♀ - Okha District, lower Tenga River, 15-25.05.1987 AB; 3o - Poronaisk District, upper Rukutama River, 17-27.04.1988 AB; 1♀ - Aniva District, Ulyanovka River, 21-22.04.1989 AB; 1♀ - Aniva District, Petropavlovskoye, 30.07.1988 AB; 1♂, 3♀ - Khabarovsk Province, 12 km NW of Bikin City, Boitsovo, forest of *Betula*, *Populus* and *Picea*, 26.05-4.07.1991 SG & WS.

DESCRIPTION. FEMALE. Total length 2.13-2.53. Carapace greyish-yellow with dark grey margin, its length/width 0.83-0.90/ 0.65-0.70. Chelicerae dark yellow. Legs dark yellow, length of joints of leg I/IV 0.93/0.95+0.25/ 0.25+0.88/0.83+0.83/0.80+0.60/0.55. Abdomen dark grey, almost black, with a dirty-white dorsal pattern. Female genitalia as in Figs. 14-16.

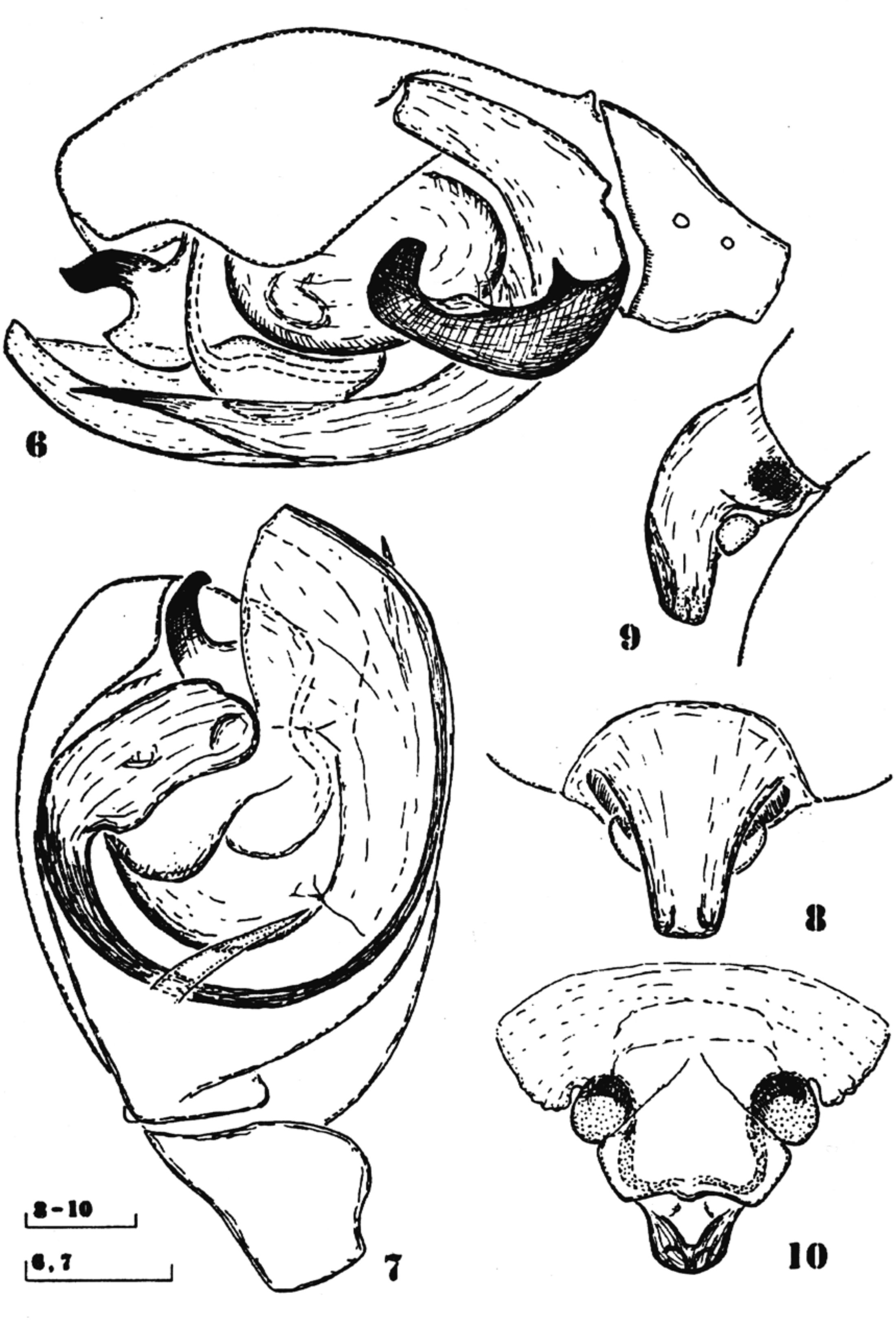
DISTRIBUTION. This species is recorded in northern [Tanasevitch, 1988], southern and middle Sakhalin Island, and middle Sikhote-Alin Mts. (original data) (Map 2).

Wubanoides pacificus Eskov et Marusik, sp.n.
Figs. 6-10, Map 1.

MATERIAL. Holotype: ♂- Magadan Area, coast of Tauiskaya Guba Gulf, 5 km E of Yana River mouth, 24.08.1990 YM.

Paratypes: 4♂, 4♀ - together with holotype; 4♂- 12 km N of Magadan, Snezhnaya Dolina, h = 1000 m, forest of *Betula* and *Pinus pumila*, 15.06.1986 YM; 3♂, 3♀ - same locality, 12-14.09.1986 YM; 2♀ - environs of Magadan, Hertner Bay, Nyuklya, *Betula* forest with *Graminea*, 27,06.1985 YM; 1♂- 70 km E off Magadan, Talon, 07.1988 YM; 6♂, 8♀ -middle Chelomdzha River (left tributary of Taui River) (148°E, 60°30' N), valley forest of *Larix gmeleni* 10.06-25.07.1987 ND; 7♂, 2♀ - same locality, 07.1987 ND; 2♂- same locality, 15-20.07.1985 ND; 1♂ , 1♀ - same locality, 06.1988 ND; 2♂, 2♀ - upper Kolyma River,

* In Yaginuma's [1977] catalogue, *Arcuphantes septentrionalis* was reported from both Hokkaido and Tsushima Islands; the sourse of the latter indication is unclear.



Figs. 6-10. *Wubanoides pacificus* sp.n.: 6 - male palp, ectal view; 7 - male palp, ventral view; 8 - epigyne, frontal view; 9 - epigyne, lateral view; 10 - epigyne, posterior view. Scales = 0.1 mm.

Рис.6-10. *Wubanoides pacificus* sp.n.: 6 - пальпа самца, ретролатеральный вид; 7 - пальп самца, вентральный вид; 8 - эпигина, вид спереди; 9 - эпигина, вид сбоку; 10 - эпигина, вид сзади. Масштаб 0.1 мм.

Sibit-Tyellakh, *Alnus fruticosa* bushes with Gramineae, 5.08.1986 YM; 1♂, 1♀ - same locality, 08.1986 YM; 1♀ - upper Kolyma River, 49 km S of Seimchan, 3.09.1990 YM; 1♂ - upper Kolyma River, Ust-Srednekan, 10.09.1990 YM; 32♂, 20♀ - Khabarovsk Province, Bolshe-Khekhtsirsky Reserve, broadleaved forest with *Pinus koraiensis*, 5-25.06.1987 DL; 7♂, 6♀ - same locality, h = 850-900 m, rocky debris, 7.06.1987 DL; 1♂ - same locality, forest of *Picea* and *Abies*, 10.09.1990 GG; 3♀ - Ulchsky District, Sofiyskoye, Skalisty Mt. Range (Yam-Alin Mts.), forest of *Picea* with green mosses, 07.1990 GG; 1♀ - 12 km N of Bikin City, Boitsovo, forest of *Betula*, *Populus* and *Picea*, 26.05-4.06.1990 SG & WS; 1♀ -Buryat Autonomous Republic, environs of Ulan-Ude, Vakhmistrovo, in *Pinus* crown, 31.05.1983 SD; 1♂, 11♀ - Irkutsk Area, Baikal Lake near source of Angara River, Bolshiye Koty, forest of *Pinus* and *Betula*, 06-07.1988 AT.

DESCRIPTION. Total length of male/female 1-95-2.10/1.85-2.38. Carapace yellowish-grey, with dark grey margin, its length/width 0.90-1.00/0.75-0.80 in male, 0.80-0.88/0.65-0.70 in female; male carapace lacking a postocular seta. Legs dark yellow, length of joints of legs I/IV 1.15/1.10+0.28/0.25+1.10/1.08+1.13/1.10+0.75/0.68 in male, 0.95/0.98+0.28/0.25+0.88/0.85+0.85/0.83+0.60/ 0.55 in female. Abdomen dark grey, with a dirty-white dorsal pattern. Genitalia of both male and female as in Figs. 6-10.

DIAGNOSIS. By the absence of both postocular seta and cymbial process in the male, as well as by the comparativelly narrow, elongated epigyne in the female, the new species seems to be most closely related to *W.enormitus*. But *W.pacificus* sp.n. may be distinguised by the very wide, two-branched lamella characteristica covering the bulbus ventrally, and by the epigyne curved in lateral aspect, with its lateral edges convergent (see Tanasevitch, 1988: Figs. 31-32, and our Figs 14-16).

DISTRIBUTION. Northeastern Siberia (upper Kolyma River an northern Cisokhotia), Far East (middle Amur River, middle Ussuri River and Yam-Alin Mountains in northern Cisamuria), southern Cis- and Transbaikalia (Map 1).

3. The *kolymensis*-group

(i) Ventral spines on tibiae present; (ii) strong, horn-like seta on male carapace absent; (iii) basal process of cymbium large, bilobated; (iv) distal portion of paracymbium without bristles; (v) embolus as a semimembraneous, irregular plate.

Wubanoides kolymensis (Tanasevitch et Eskov,1987) **comb.n.**
Map 2.

Lepthyphantes kolymensis Tanasevitch & Eskov, 1987: 186, Fig. 1, 1-4 (♂, ♀).

DISTRIBUTION. This species is known from the locus typicus only: Bolshoi Annachag Mt. Range at the upper Kolyma River (Map 2), where it is restricted to the alpine belt (mountain tundra, or "goltsy") [Tanasevitch & Eskov, 1987].

Key to the *Wubanoides* species

1(14) Males.

2 (9) Carapace with a strong, horn-like, postocular seta.

3 (6) Horn-like seta crowning a finger-like carapace process.

4 (5) Horn-like seta directed from tip of process anterodorsad; cymbial process distinctly curved; distal portion of paracymbium with two sharp vertical teeth .... *W.uralensis* (Pakhorukov)

5 (4) Horn-like seta directed from tip of process anteroventrad; cymbial process straight; distal portion of paracymbium with a single, rounded, vertical outgrowth... *W.fissus* (Kulczynski)

6 (3) Horn-like seta arises from carapace surface.

7 (8) Palpal tibia with a long vertical outgrowth; cymbium basally with two small teeth................................ *W.septentrionalis* (Oi)

8 (7) Palpal tibia without any outgrowths; cymbium basally with a long claw-like process..................................... *W.kayacensis* (Paik)

9 (2) Carapace without strong, horn-like, seta.

10 (13) Tibiae without ventral spines; cymbium without basal process; distal portion of paracymbium bears bristles.

11 (12) Distal portion of paracymbium with a single rounded outgrowth; an extremely wide bibranched lamella characteristica covers bulbus both laterally and ventrally................

....*W.pacificus* sp.n.

12 (11) Distal portion of paracymbium with two sharp outgrowths; a uniramous lamella characteristica covers bulbus laterally........... ....*W.enormitus* (Tanasevitch)

13 (10) Tibiae with ventral spines; cymbium with a large bilobated basal process; distal portion of paracymbium lacks........ ....*W.kolymensis* (Tanasevitch et Eskov)

14 (1) Females.

15 (16) Tibiae and metatarsi with ventral spines.......*W.kolymensis* (Tanasevitch et Eskov)

16 (15) Tibiae and metatarsi without ventral spines.

17 (22) Scape no longer than wide, more or less roundly-triangular.

18 (21) Scape regularly convex, shield-like, its posterior edge with a longitudinal notch.

19 (20) Posterior notch of scape shorter than half of scape length................................ ....*W.uralensis* (Pakhorukov)

20 (19) Posterior notch of scape longer than half of scape length................................... ....*W.fissus* (Kulczynski)

21 (18) Scape surface with two lateral convexities divided by a longitudinal depression, posterior edge of scape without notch... ....*W.septentrionalis* (Oi)

22 (17) Scape longer than wide.

23 (24) Scape surface with two long diagonal sutures ....*W.kayacensis* (Paik)

24 (23) Scape surface without long diagonal sutures.

25 (26) Epigyne straight in lateral aspect, lateral edges of scape parallel.......................... ....*W.enormitus* (Tanasevitch)

26 (25) Epigyne curved in lateral aspect, lateral edges of scape convergent............... ....*W.pacifisus* sp.n.

Genus *Parawubanoides* Eskov et Marusik, n.

Type-species: *Linyphia unicornis* O.Pickard-Cambridge, 1873.

DESCRIPTION. Small, pale coloured linyphiine spiders. Male carapace bears a strong, horn-like, pointed seta which rises immediately behind PME and arches forward over ocular area. Chelicerae medium-sized, unmodified, with well-developed lateral stridulatory fields and three promarginal teeth. Leg spinulation: Fe I - 0100, Fe II-IV - 0000, Ti I - 2000 (in male) or 2110 (in female), Ti II - 2010, Ti III-IV - 2000, Mt I-IV - 1000; Mt I in male provided with two ventral rows of protruding bristles; Tm I - 0.25, Tm IV absent. Abdomen with a dorsal pattern of transverse dark bands.

Male palpal patella with a conical knob surmounted by an enlarged seta of particular shape, broadened and flattened distad as a triangle. Tibia without distinct outgrowths. Cymbium with a stump crest-like basal process. Paracymbium large, L-shaped. Lamella characteristica comparatively short, broadened and split distad, more or less flabellate. Embolus flattened and direct, pointed distad. Epigyne with a scape of various shapes (from strongly elongated and protruding to flat and subquadrate), and a short direct stretcher more or less fused with scape.

DIAGNOSIS. By the general conformation of both male and female genitalia, as well as by the enlarged seta on the male palpal patella, the new genus seems to be closely related to the genus *Bolyphantes* C.L.Koch,1837. *Parawubanoides* gen.n. is distinguished by the absence of ventral spines on the tibiae, a shovel-shaped seta on the palpal patella, and a trend to the stretcher fused to the scape, as well as by the male leg I spinulation (absence of both lateral spines on the tibia and presence of two rows of bristles on the metatarsus), and horn-like seta on the male carapace. By the two latter characters, the new genus is similar to *Wubanoides* Eskov,1986.

DISTRIBUTION. The new genus comprises three species: *Lepthyphantes unicornis* [O.Pickard-Cambridge, 1873] and *L.marusiki* Tanasevitch, 1987, both from East and South Siberia, and *Bolyphantes nigromaculatus* Zhu et Wen, 1983 from Manchuria. Possibly also *Lepthyphantes aldersoni* L.Levi et H.Levi, 1955 from the Rocky Mountains of Canada belongs to this genus (see Levi & Levi, 1955: Fig. 10) but, prior to the description of its male, this problem remains obscure.

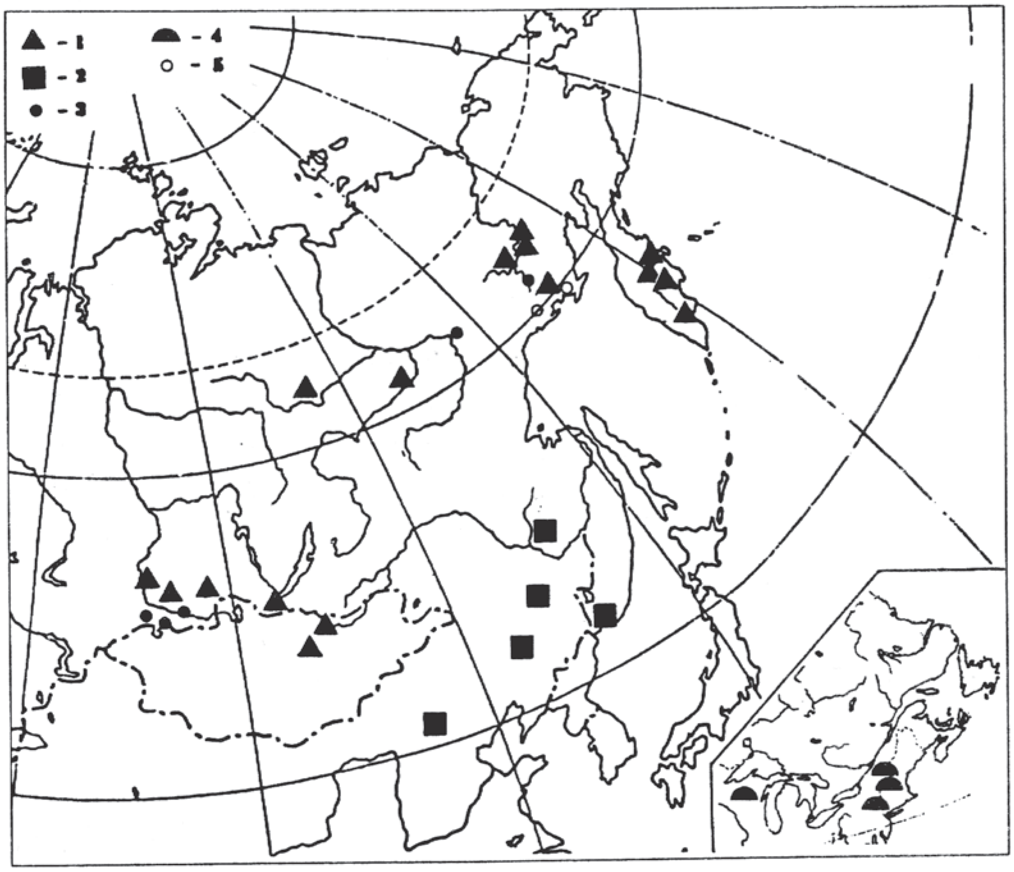
Parawubanoides unicornis (O.P.-Cambridge,1873) comb.n.
Map 3.

Linyphia unicornis O.Pickard-Cambridge, 1873: 438, Tab. 40, Fig. 4, a-g (♂, ♀).

Lepthyphantes unicornis: Simon, 1884: 330.

Bathyphantes (?) fucatus Kulczynski, 1885: 35, Tab. 10, Fig. 14 (♀), syn.n.

Bolyphantes bonneti Loksa, 1965: 8, Figs. 13-14 (♂)



Map 3. Distribution of *Parawubanoides* (1-3) and *Actinoneta* (4-5) species: 1 - *P.unicornis*; 2 - *P.nigromaculatus*; 3 - *P.marusiki*; 4 - *P.(A.) furcata*; 5 - *P.(A.) aggressa*.
Карта 3. Распространение видов рода *Parawubanoides* (1-3) и подрода *Actinoneta* (род *Poeciloneta*, 4-5): 1 - *P.unicornis*; 2 - *P.nigromaculatus*; 3 - *P.marusiki*; 4 - *P.(A.) furcata*; 5 - *P.(A.) aggressa*.

(synonymized by Starega, 1974).
Bolyphantes unicornis: Starega, 1974: 20, Figs. 4-6 (♀).
Linyphia unicornis: Helsdingen, 1978: 190.
Lepthyphantes unicornis: Tanasevitch, 1987a: 343.

MATERIAL. 1♀ - Yakut Autonomous Republik, 50 km SW of Yakutsk, Oktemtsy, 07.1977 SK; 1♀ - 40 km W of Suntar (at Vilui River), Toibokhoi, 07.1977 SK; 2♂, 2♀ - Tuva Autonomous Republic, Todzha District, Azas Reserve, forest of *Larix* and *Betula*, 19-23.06.1989 DL.

TAXONOMIC REMARKS. Since Simon's [1884] time, this species was enlisted in the genus *Lepthyphantes*. However, dealing with the "*Linyphia*" species described by Pickard-Cambridge [1873] from Cisbaikalia, Helsdingen [1978] emphasized great differences of *Linyphia unicornis* from all the known *Lepthyphantes* species. Such are the curiously modified seta on the male palpal patella, horn-like seta on the male carapace, the scape with concave lateral margins and a narrow tip. Unfortunately, the bulbal structures in *L.unicornis* were neither described nor figured by Pickard-Cambridge [1873], while its types kept in the Oxford Collection seem to be lost. Due to this, Helsdingen [1978] definitely ejected *L.unicornis* from the genus *Lepthyphantes*, but did not arrive to a conclusion on its real taxonomic status. It should be noted that in some modern works (e.g. Tanasevitch, 1987a) this species is still listed under its traditional name, i.e. *Lepthyphantes unicornis*. At the same time, Helsdingen [1978] did not comment Starega's [1974] opinion that this species belongs to the genus *Bolyphantes*; to our mind, such an attribution was closer to the truth.

Bathyphantes fucatus Kulczynski, 1885 was originally described from Kamchatka Peninsula as based on a single female [Kulczynski, 1885], and later it was repeatedly recorded (females only) from that region by several authors [Kulczynski, 1926; Schenkel, 1930; Sytshevska-

ja, 1935]. The holotype of *B.fucatus* was not found by one of the coauthors (KE) in the Kulczynski Collection in the Institute of Zoology (Warszaw). However, the figures by Kulczynski [1885] permit to synonymize this species under *L.unicornis* with fair certainty. Besides the synonymy of the Mongolian *Bolyphantes bonneti* Loksa, 1965 under *L.unicornis*, proposed by Starega [1974], is undoubted.

DISTRIBUTION. This species was recorded in several points of Kamtchatka Peninsula [Kulczynski, 1885,1926; Schenkel, 1930; Sytshevskaja, 1935] and upper Kolyma River [Marusik et al., in press], central and western Yakutia (original data), southern Cisbaikalia [Pickard-Cambridge, 1873], southern Krasnoyarsk Province and Tuva [Tanasevitch, 1987a, and original data], Khentei Mts. in Mongolia [Loksa, 1965; Starega, 1974] (Map 3).

Parawubanoides marusiki (Tanasevitch,1987) comb.n.

Map 3.

Lepthyphantes marusiki Tanasevitch, 1987a: 336, Figs.7-11 (♂, ♀).

MATERIAL. 1♀ - Yakut Autonomous Republic, lower Aldan River, Khandyga, 1.09.1990 IS; 1♂, 6♀ - Tuva Autonomous Republc, environs of Kyzyl, floodland forest of *Populus*, 7.06.1989 DL; 3♀ - same locality, floodland meadow, 23.07.1989 DL; 4♂, 3♀ - Erzin District, 5 km S of Erzin, valley of Tes-Khem River, floodland forest, 14.08.1989 DL; 1♀ - Tandinsky District, Khovu-Aksy, steppe slope, 4-6.05.1989 DL.

DISTRIBUTION. This species was recoeded in northeastern Siberia, at Kolyma River [Tanasevitch, 1987a], Aldan River (original data), and in Tuva (original data) (Map 3).

Parawubanoides nigromaculatus (Zhu et Wen,1983) comb.n.

Map 3.

Bolyphantes nigromaculata Zhu et Wen, 1983: 150, Fig.2, A-G (♂, ♀).

Bolyphantes auriformis Zhu et Tu, 1986: 98, Figs.1-4 (♂, ♀).

MATERIAL. 4♀ - Amur Area, Arkhara, meadow, 12.08.1983 YM; 1♀ - Maritime Province, environs of Vladivostok, Artyom, 3.06.1981 PD.

TAXONOMIC REMARKS. The synonymy of *B.nigromaculata* and *B.auriformis*, both from the northeastern China, is doubtless. Small differences in the shape of the epigynal plate (subquadate or oval, respectively) seems to be intraspecific variations.

DISTRIBUTION. Manchuria [Zhu & Wen, 1983], middle Amur River and southern Maritime Province (original data) (Map 3).

Key to the *Parawubanoides* species

1 (6) Males.

2 (5) Basal process of cymbium high; lamella characteristica short, approximately as long as wide.

3 (4) Basal process of cymbium orthogonal; lamella characteristica furcate...................... ....*P.unicornis* (O.Pickard-Cambridge)

4 (3) Basal process of cymbium rounded; lamella characteristica trifuscate....................... ....*P.marusiki* (Tanasevitch)

5 (2) Basal process of cymbium low, poorly distinguishable; lamella characteristica long, much longer than wide.................................... ....*P.nigromaculatus* (Zhu et Wen)

6 (1) Females.

7 (10) Scape not wider than long; stretcher almost fused with scape.

8 (9) Epigyne protruded; scape sufficiently longer than wide.. ....*P.unicornis* (O.Pickard-Cambridge)

9 (8) Epigyne flattened; scape subquadrate to oval, as long as wide................................. ....*P.nigromaculatus* (Zhu et Wen)

10 (7) Scape almost twice wider than long; stretcher long, free... ....*P.marusiki* (Tanasevitch)

Genus *Poeciloneta* Kulczynski,1894

Subgenus *Poeciloneta* (s.str.) Kulczynski,1894

Type-species: *Neriene variegata* Blackwall,1841.

DESCRIPTION. See definition of the genus *Poeciloneta* in Tanasevitch [1989].

DISTRIBUTION. The nominal subgenus comprises 10 species*. It is represented in East Siberia by six endemic species, i.e. *P.pallida* Kulczynski, 1908, *P.petrophila* Tanasevitch, 1989, *P.vakhanka* Tanasevitch, 1989, *P.tanasevitchi* Marusik, 1991 (see Tanasevitch, 1989; Marusik, 1991b), and two yet undescribed forms (our own materials). Three endemic species have been recorded in the Nearctic, i.e. *P.berthae* (L.Levi et H.Levi, 1955), *P.fructousa* (Keyserling, 1886) and *P.theridiformis* (Emerton, 1911) (see Crawford, 1988; Tanasevitch, 1989); two former are restricted to the Pacific coast of North America, and the last to the Atlantic one. One species, *P.variegata* (Blackwall, 1841), is common both in Siberia and in western Nearctic, as well as in Europe.

Subgen. *Acanthoneta* Eskov et Marusik, **n.**

Type-species: *Lepthyphantes aggressus* Chamberlin et Ivie, 1943.

DESCRIPTION. Medium-sized linyphiine spiders. Male carapace unmodified. Chelicerae medium-sized, unmodified, with three promarginal teeth. Leg spinulation: Fe I - 0100, Fe II-IV - 0000, Ti I - 2000, Ti II - 2010, Ti III-IV - 2001, Mt I-IV - 1001 ; Tm I - 0.80, Tm IV present. Abdomen with a dorsal pattern. Male palpal tibia rounded. Cymbium with a distinct basal process. Paracymbium medium-sized, comparatively simple, L-shaped. Lamella characteristica long and narrow, split into to two parallel, spine-shaped branches; embolus flattened. Scape of epigyne twice longer than wide, protruding dorsally and concave ventrally. Epigyne witth distinct lateral lobes and a stretcher.

DIAGNOSIS. The new subgenus is distinguished from the remaining species of *Poeciloneta* Kulczynski, 1894, all forming the nominal subgenus *Poeciloneta* (s.str.), by the very long and narrow lamella characteristica and dorsally protruding scape, as well as by the spinulated metatarsi and ventrally spinulated tibiae. On the other hand, by the general outline of the male palp, *Acanthoneta* subgen.n. is similar to *Wubanoides* Eskov, 1986, in particular to the *kolymensis*-group, and can be considered as an "intermediate link" between both genera.

DISTRIBUTION. The new subgenus comprises *Poeciloneta aggressa* (Chamberlin et Ivie, 1943) from both Siberian and North American coasts of the Pacific, and *Lepthyphantes furcatus* (Emerton, 1913) from the Atlantic coast of the Nearctic.

Poeciloneta (Acanthoneta) aggressa (Chamberlin et Ivie, 1943), **comb.n.**
Figs. 11-13, Map 3.

Lepthyphantes aggressus Chamberlin & Ivie, 1943: 14, Figs. 19-20 (♂, ♀).
Poeciloneta aggressa: Crawford, 1988: 19.

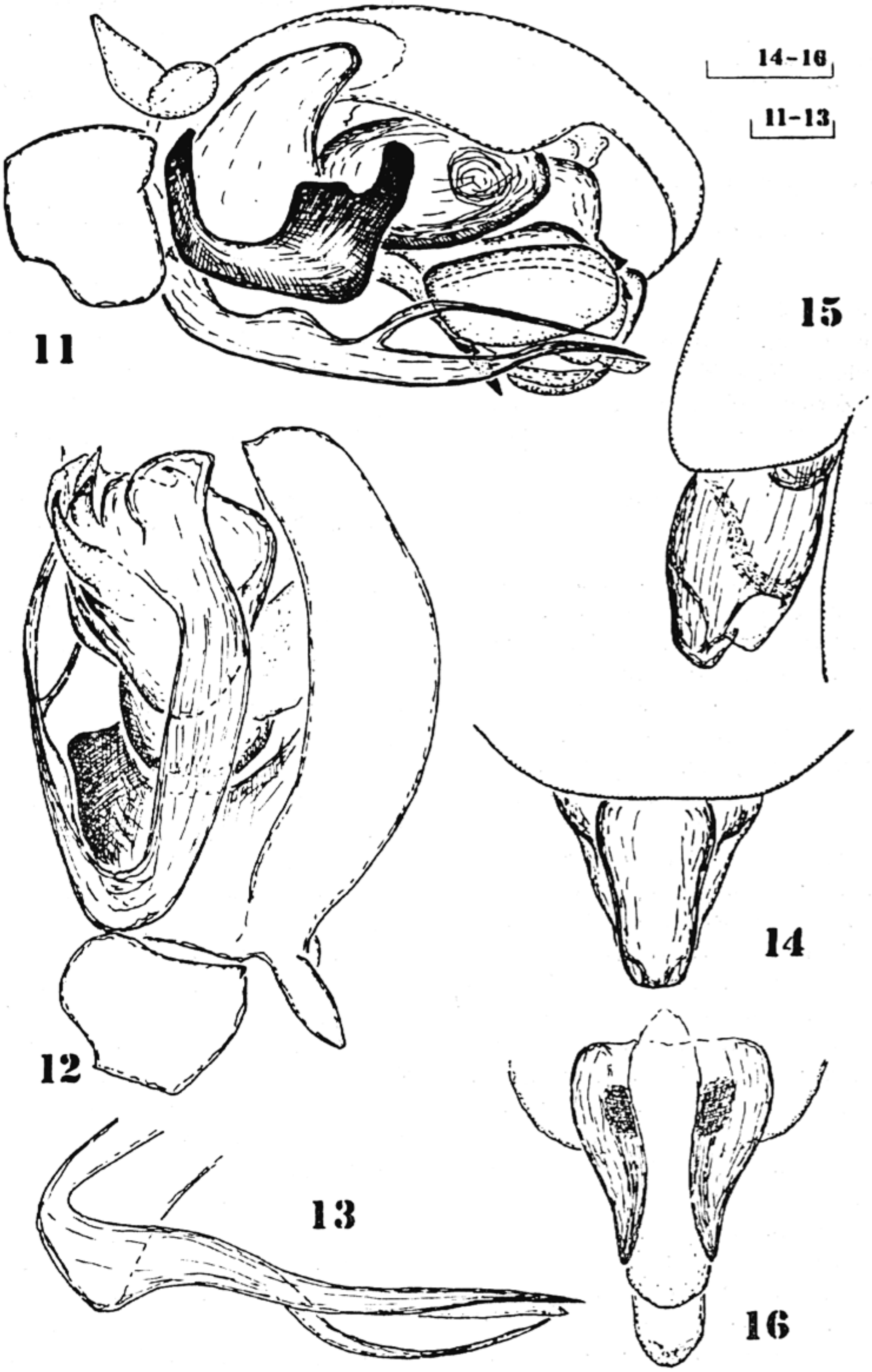
MATERIAL. 1♂ - Magadan City, in a building, 28.07.1991 YM; 4♂ - Magadan Area, middle Chelomdzha River (left tributary of Taui River), 06-08.1986 ND.

DESCRIPTION. Total length of male 3.10-3.28. Carapace brownish-yellow, with dark-grey medial spot, radial strips and margins, its length/width in male 1.40-1.48/1.10-1.20, clypeus with several hairs. Legs dark-yellow, each joint annulated by both a wide medial pale grey and a narrow terminal dark grey ring; leg spinulation: Ti I - 2000, Ti II - 2010, Ti III-IV - 2001, Mt I-IV - 1001; length of joints of legs I/IV in male 2.10/1.95+ 0.38/0.35+2.10/1.88+ +2.18/2.00+0.93/0.90. Abdomen black with a white dorsal pattern. Male genitalia as in Figs. 11-13.

TAXONOMIC REMARKS. *P.(A.) aggressa* is distinguished from the only consubgener, *P.(A.) furcata*, by the bilobated cymbial process with a pointed anterior lobe and by the convergent (not subparallel) lateral edges of the scape. It should be noted that in Siberian and Nearctic specimens of *P.(A.) aggressa*, the shape of the paracymbium seems to be quite dissimilar (our Fig. 11 and Chamberlin & Ivie, 1943: Fig. 19); we possibly face two subspecies separated by the Bering Strait.

DISTRIBUTION. This species has been recorded on the Pacific coast of North America: Utah, Wyoming and Washington [Chamberlin & Ivie, 1943; Crawford, 1988; Buckle, personal communication], as well as in northern Ci-

* Two nearctic species, i.e. *P.bellona* Chamberlin et Ivie, 1943 and *P.canionis* Chamberlin et Ivie, 1943, were ejected by Tanasevitch [1989] from the genus *Poeciloneta*.



Figs. 11-13. ***Poeciloneta (Actinoneta) aggressa*** (Chamberlin & Ivie,1943): 11- male palp, ectal view; 12 - male palp, mesal view; 13 - lamella characteristica. Figs. 14-16. *Wubanoides enormitus* (Tanasevitch,1988): 14 - epigyne, frontal view; 15 - epigyne, lateral view; 16 - epigyne, posterior view. Scales = 0.1 mm.

Рис.11-13. ***Poeciloneta (Actinoneta) aggressa*** (Chamberlin & Ivie,1943): 11 - пальпа самца, ретролатеральный вид; 12 - пальпа самца, пролатеральный вид; 13 - lamella characteristica. Рис 14-16. *Wubanoides enormitus* (Tanasevitch,1988): 14 - эпигина, вид спереди; 15 - эпигина, вид сбоку; 16 - эпигина, вид сзади. Масштаб 0.1 мм.

sokhotia (original data) (map 3).

Poeciloneta (Acanthoneta) furcata (Emerton,1913) comb.n.
Map 3.

Bathyphantes furcatus Emerton, 1913: 218, Tab. 2, Fig. 7 (♂).
Lepthyphantes furcatus: Zorsch, 1937: 871, Figs. 36-39 (♂, ♀).

DISTRIBUTON. This species has been recorded on the Atlantic coast of North America: New Hempshire, New York, Vermonth and Wisconsin (Zorsch, 1937; Buckle, personal communication) (Map 3).

Zoogeographical notes

First of all, it should be noted that the taxonomically distant *Wubanoides* and *Parawubanoides* demonstrate remarkably similar distribution patterns. Due to this, both genera will be considered together, being supposed representatives of a single centre of faunogenesis. The ranges of both genera can be referred, with minor reservations, to a Siberio-Far Eastern pattern. Almost all their members are distributed in the North Asiatic segment of the "Circum-Pacific mountain Ring" (from Korea to Chukotka). A few species penetrate inner parts of the Asiatic continent: *W.fissus* - up to East Siberia, *W.pacificus*, *P.unicornis*, *P.marusiki* up to South Siberia. A single species, *W.uralensis*, is absent from the Pacific Region.

Both closely related and allopatric *W.uralensis* and *W.fissus* clearly form a vicariant couple divided by the Yenisey zoogeographical barrier (Johansen's Line). Such a vicariance pattern can be supposed to have been the result of a comparatively recent, glacial, disruption of a single North Palearctic range of the ancestral species. The influence of glaciations seems to be reflected in the range of *W.uralensis* by the existence of an isolated population in the mountains of Central Europe.

The ranges of both *P.unicornis* and *P.marusiki* clearly belong to the "generalized track" (according to Croizat) connecting South Siberia (including Mongolia) with northeastern extreme Asia, via Transbaikalia and Yakutia. The range of *W.pacificus* seems to belong to the same pattern; besides, this species penetrates southward up to Khekhtsyr Mts., on middle Amur flow, via Yam-Alin Mts. in northern Cisamuria.

Let us return to the main, Pacific, part of the genera's range. The abovementioned North Asiatic Circum-Pacific segment can be divided into southern (from Korea to Sakhalin) and northern (from Shantar Islands to Chukotka) semisegments; they are abbreviated below as SS and NS, respectively. Five species are distributed in SS, three of them are endemics (*W.kayacensis*, *W.septentrionalis*, *W.enormitus*). Three species occur in NS, one of them is endemic (*W.kolymensis*). Besides, two species are common to SS and NS (*W.pacificus*, *W.fissus*), both apparently being northern in origin origin. *Parawubanoides* is represented by one endemic in SS (*P.nigromaculatus*), two endemics in NS (*P.unicornis*, *P.marusiki*), and no common species for both segments. So the SS *Wubanoides* fauna is more rich in general (5 species against 3) and in endemics in particular (60% against 33%) than the NS one. On the other hand, contrary to SS, the NS semisegment possesses an endemic species group (the *kolymensis*-group). The NS *Parawubanoides* fauna is richer than the SS one (2 species against 1, all are endemics).

As a result two main zoogeographical conclusions may be drawn:

(1) The similar richness and endemicity of both *Wubanoides* and *Parawubanoides* faunas of SS and NS permit to suppose in each genus the existence of two more or less equivalent centres of speciation, namely Manchurian and Beringian. These patterns seem to be dissimilar with ones of the majority of Siberio-Far Eastern genera, such as *Ummeliata* Strand, 1942 (see Eskov, 1980,1992) and *Savignya* Blackwall, 1833 (see Eskov, 1988,1991a); usually the Manchurian centre of speciation dominates sharply.

(2) The role of *Wubanoides* and *Parawubanoides* in the formation of a "Mongol-Beringian track" is unusual, too. Quite a number of spider supraspecific taxa form such a pattern; the linyphiid genera *Erigonoplus* Simon, 1884, *Dactylopisthes* Simon, 1884 and *Minicia* Thorell, 1875, and the salticid genus *Chalcoscirtus* Bertkau, 1883 can be mentioned as examples (see Eskov, 1985,1990,1991b; Marusik, 1991a). The majority of these taxa are of Ancient-Mediterranean origin and seem to have the penetrated Siberia from Central Asia; the formation

of such ranges has been specially discussed by Eskov [1985]. *Wubanoides* and *Parawubanoides* belong to the few taxa which seem to have "built this bridge from the river's opposite bank", penetrating into the central Asia from Beringia.

In the genus *Poeciloneta*, the nominal subgenus comprises 10 species; 7 species are present in East Siberia, 6 of them apparently being endemics of this region. The Nearctic fauna of *Poeciloneta* (s.str.) is almost twice scanty: 4 species, 3 of them endemics. It should be noted that only one Nearctic species, *P.fructuosa*, is distributed outside the Pacific coast of North America. The subgenus *Acanthoneta* comprises two species, i.e. the East Neartic *P.furcata*, and the *P.aggressa* common for the western Nearctic and northeastern Siberia. Hence, the genus *Poeciloneta* demonstrates a typical Siberio-Nearctic (mainly northeastern Siberio-western Nearctic) connection. Moreover, each of its subgenera, *Poeciloneta* (s.str.) and *Acanthoneta*, demonstrates just the very same connection. However, the former subgenus can be supposed to be a taxon Siberian in origin which penetrated the Nearctic; in the latter, the trend seems to have been opposite.

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